

**PRODUCTION OF 1-HEXENE**

**Patent number:** JP9268134  
**Publication date:** 1997-10-14  
**Inventor:** MIMURA HIDEYUKI; AOYAMA TAKAMITSU;  
YAMAMOTO TOSHIHIDE; OGURI MOTOHIRO; KOIE  
YASUYUKI  
**Applicant:** TOSOH CORP  
**Classification:**  
- **international:** C07C11/107; B01J31/02; C07C2/26; C08F4/69  
- **european:**  
**Application number:** JP19960080038 19960402  
**Priority number(s):**

**Abstract of JP9268134**

**PROBLEM TO BE SOLVED:** To provide a method for producing 1-hexene by trimerizing ethylene in the presence of a chromium catalyst comprising three components, capable of highly selectively obtaining the 1-hexene by using an aliphatic hydrocarbon as a solvent and adding a specific olefin, diene or triene compound in a specified amount to the reaction system.

**SOLUTION:** This method for producing 1-hexene comprises trimerizing ethylene in the presence of a chromium catalyst comprising a chromium compound, an alkyl metal compound and highly safe and easily handleable imide compound. Therein, an aliphatic hydrocarbon is used as a solvent, and one or more kinds of compounds selected from the group consisting of an inner olefin compound, a non-conjugated diene compound and a non-conjugated triene compound is added to the reaction system in an amount of 0.01-50vol.% based on the charged solution. The added olefin compound is preferably a non-conjugated diene compound, especially preferably 1,5-cyclooctadiene. The solvent is preferably cyclohexane or heptane. The imide compound is preferably melimide, etc. The chromium compound is preferably chromium & beta-diketonate compounds, etc., and the alkyl metal compound is preferably methyl lithium, etc.

---

Data supplied from the esp@cenet database - Patent Abstracts of Japan